AMENDMENTS TO THE CLAIMS

Please cancel claim 8 and amend claim 1 as indicated among the following complete set of pending claims:

1. (Canceled)

2. (Currently Amended) A method executed in a computing system for preprocessing audio data before subsequent processing by a predetermined codec optimized for voice data, the predetermined codec being operable to encode the audio data using one of a plurality of encoding rates, and the predetermined codec includes a predetermined rate decision algorithm for classifying frames of the audio data into the noise data or the valid voice data and for deciding an encoding rate for encoding each frame of audio data, wherein ~~the predetermined codec being configured to classify at least some~~ frames of audio data classified as noise data are ~~thereby~~ encoded ~~encoding the at least some frames~~ at the lowest encoding rate among the plurality of encoding rates, and ~~to classify at least some other~~ frames of audio data classified as valid voice data are encoded ~~thereby encoding the at least some other frames~~ at one of the plurality of encoding rates other than the lowest encoding rate thereof, the preprocessing method comprising the steps of:

for each frame, deciding~~analyzing~~, in the computing system, an encoding rate for that frame using the predetermined rate decision algorithm of the predetermined codec, ~~audio data~~ so as to select ~~the~~ at least some frames that, when provided to the predetermined codec, are classified as noise data and encoded at the lowest encoding rate by the predetermined codec; ~~and~~

adjusting, in the computing system, energy of the at least some frames of audio data selected in the deciding ~~analyzing~~ so as to produce preprocessed frames of audio data that,

when provided to the predetermined codec, are classified as valid voice data by the predetermined rate decision algorithm and encoded at the one of the plurality of encoding rates other than the lowest encoding rate thereof; and

providing the preprocessed frames of audio data to the predetermined codec, so that in the predetermined codec, the encoding rate of the preprocessed frame is decided by the predetermined rate decision algorithm,

wherein preprocessing the at least some frames of audio data causes the predetermined codec to classify the preprocessed frames of audio data as valid voice data instead of noise data.

3. (Previously Presented) The method in accordance with claim 2, further comprising the step of determining whether a frame in the audio data is a silence frame based on the energy of the frame, wherein when the frame is a silence frame, the energy thereof is not adjusted in the adjusting step.

4. (Previously Presented) The method in accordance with claim 2, wherein the adjusting comprises the steps of:

calculating signal levels of the selected frames of the audio data;

determining gain values based on the calculated signal levels produced by the calculating; and

generating preprocessed frames of audio data by multiplying the gain values to the selected frames of audio data.

5. (Previously Presented) The method in accordance with claim 4, wherein the frame includes a set of samples including a current sample, and a signal level for the current sample is determined based on the current sample and other samples adjacent to the current sample, and the gain value for the current sample in the frame is determined based on the signal level of the current sample.

6. (Previously Presented) The method in accordance with claim 5, wherein the signal level for the current sample is determined based on the current sample and a first set of samples within an attack time ahead of the current sample, and a second set of samples within a release time behind the current sample.

7. (Previously Presented) The method in accordance with claim 6, wherein the attack time and the release time can be changed based on the characteristic of the audio data.

8. (Canceled)

9. (Previously Presented) The method in accordance with claim 2, wherein the computing system for preprocessing audio data is a separate system from the predetermined codec.